

Work Order ID 135257

135257

Page 1

Friday, August 07, 2015 2:24:47 PM

Item ID: D3137-3

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Guide

Start Date: 8/10/15

Start Qty: 30.00

30

Cust Item ID:

Required Date: 8/10/15

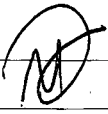
Req'd Qty: 30.00

30

Customer:

Reference:

Approvals:

Process Plan: Date: 8.8.7

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursTool ID , Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3137

Rev F

100

0.00

100

BAND SAW

Bandsaw

Memo

0.01

Jeaspa Bandsaw

Cut Blanks.Blank size: 1.250" x .750" x .950" long

30 0 15/08/12

110

0.03

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.03

HAAS CNC vertical machine #1

1-Machine as per Folio FA242 & Dwg D31372-Deburr

30 0 15/08/13

120

0.00

120

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.01

Quality Control

30 0 15/08/12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 135257

135257

Page 2

Friday, August 07, 2015 2:24:47 PM

Item ID: D3137-3 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Guide
 Start Date: 8/10/15 Start Qty: 30.00 *30* Cust Item ID:
 Required Date: 8/10/15 Req'd Qty: 30.00 *30* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00				30	Ø		DAS 40 9-89
130	Memo	0.01							15/08/13
QC									
Quality Control									
140	Identify as per dwg & Stock Location: <u>ST019</u>	0.00							
140									
Packaging	Memo	0.01				30	JA		DAS 26 9-89
Packaging									AUG 13 2015
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.05							
Quality Control									MCS AUG 14 2015 MF 15-8-14

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Friday, August 07, 2015 2:24:52 PM

Page 1

Work Order ID: 135257

135257

Parent Item: D3137-3

D3137-3

Parent Item Name: Guide

Start Date: 8/10/15

Required Date: 8/10/15

Start Qty: 30.00

Required Qty: 30.00

Comments:

IPP Rev:A02.05.29New IssueNG

IPP Rev:B 08-05-23 revE as per dwg DD verified by:EC

IPP Rev c 08.07.03 ECN1207 EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDEL RINB0.75X1.250		Purchased		No		100	f	9.6370	0.0791	2.497895			

MDFI RINB0 75X1 250

Delrin Bar

Handwritten: 15/08/12

Location

Loc Qty

Loc Code

MAT039

9.637

m130432

9.637

2,854'

DQA: _____ Date: _____

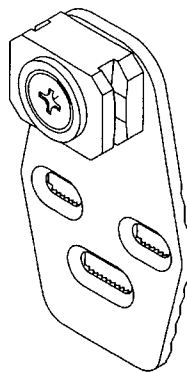


WORK ORDER NON-CONFORMANCE / UPDATE

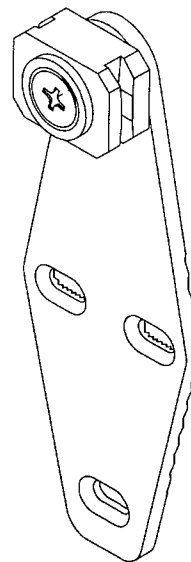
QA Closed: _____ Date: _____

Work Order update only ☐

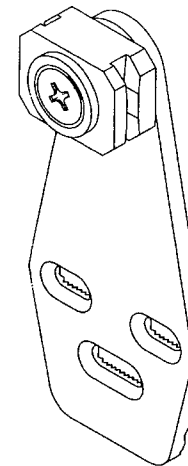
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
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Misidentified ☐	Past Due ☐																																																														



D3137-041 BRACKET ASSEMBLY



D3137-043 BRACKET ASSEMBLY



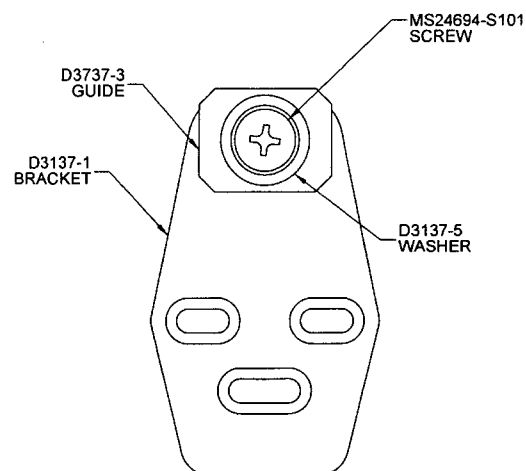
D3137-045 BRACKET ASSEMBLY

RELEASED
28.06.2017

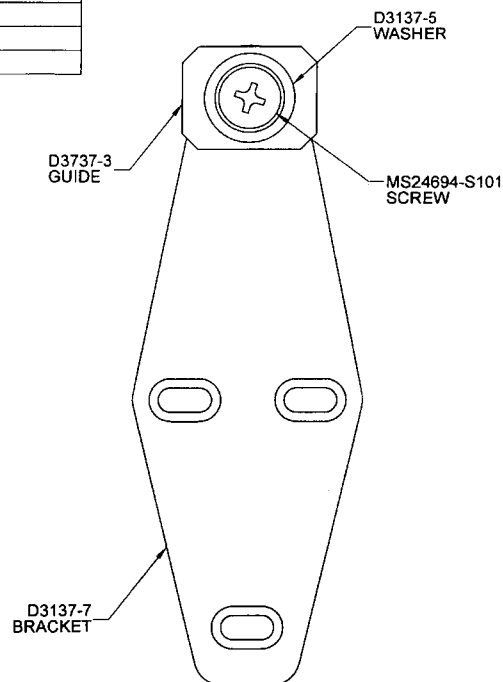
Handwritten: DS-8-7
135257

F	REDRAWN & REFORMATTED IN SOLIDWORKS. SHEET 3 ZONE A 5 DIM 2.38 WAS 2.48, ZONE A 4 0.480 DIM WAS 0.805, ZONE A 8 0.67 DIM WAS 0.79, ZONE B 5 4.850 DIM WAS 4.975 & ZONE B 8 5.29 DIM WAS 5.41. REASON: PART TRIMMED DUE TO INTERFERENCE WITH EXECUTIVE INTERIOR.			AJS	08.05.30
E	ADD -045			RF	05.11.23
D	RE-DESIGN D3137-5; CHANGE DIMS			DS	04.11.03
C	ADD -043			DS	03.08.15
B	ADD RIDGES; ADD MATERIAL PROP			DS	03.01.16
A	NEW ISSUE			DS	02.04.17
REV.	DESCRIPTION			BY	DATE
DESIGN	DS		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	AJS				
CHECKED			DRAWING NO.	REV. F	
MFG. APPR.			D3137	SHEET 1 OF 5	
APPROVED			TITLE	SCALE	
DE APPR.			BRACKET ASSEMBLY	NTS	
DATE	08.05.30		COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

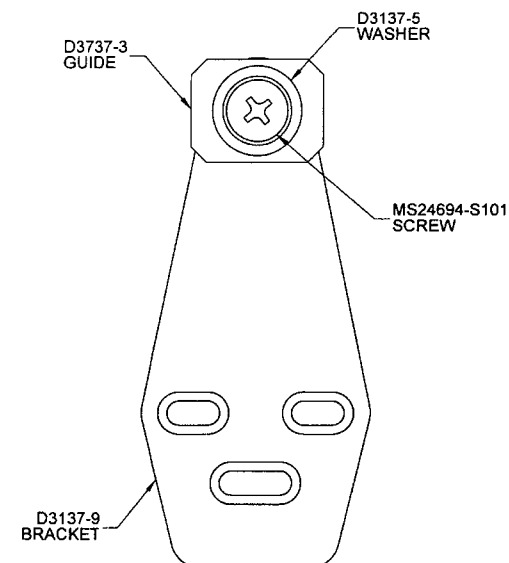
QTY. -041	QTY. -043	QTY. -045	PART NUMBER	DESCRIPTION
X			D3137-041	BRACKET ASSEMBLY
	X		D3137-043	BRACKET ASSEMBLY
		X	D3137-045	BRACKET ASSEMBLY
1			D3137-1	BRACKET
1	1	1	D3137-3	GUIDE
1	1	1	D3137-5	WASHER
	1		D3137-7	BRACKET
		1	D3137-9	BRACKET
1	1	1	MS24694-S101	SCREW



D3137-041 BRACKET ASSEMBLY



D3137-043 BRACKET ASSEMBLY



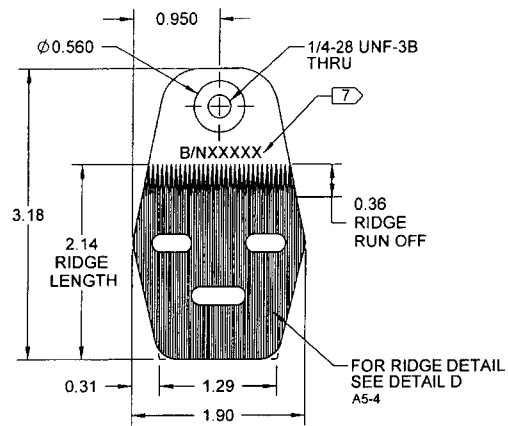
D3137-045 BRACKET ASSEMBLY

NOTES:

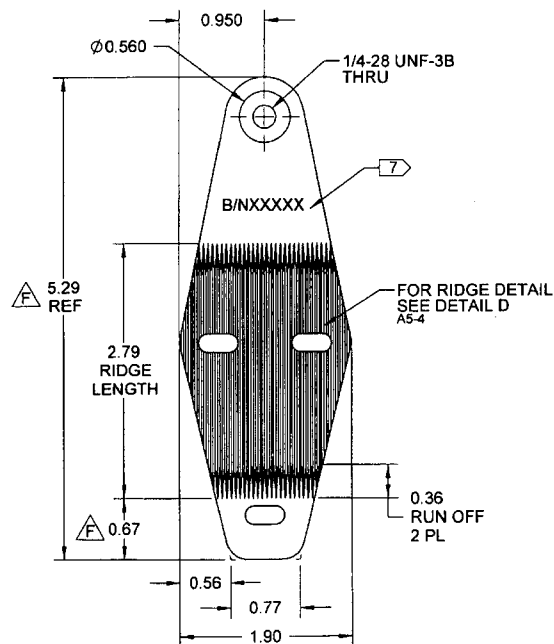
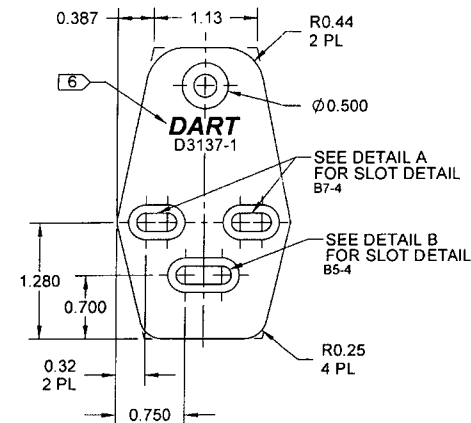
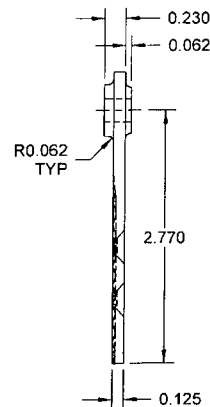
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.18 lbs -041
: 0.32 lbs -043
: 0.27 lbs -045

RELEASED
08-06-26/10

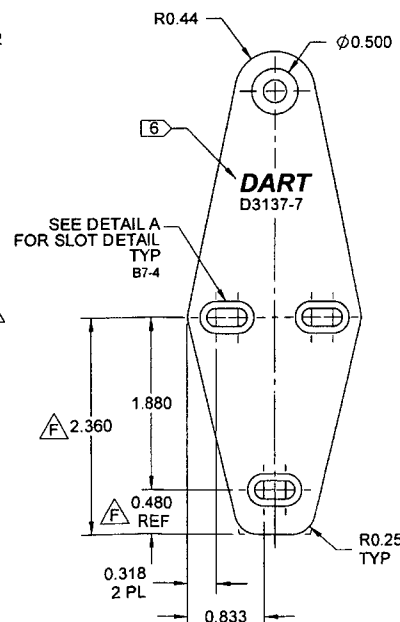
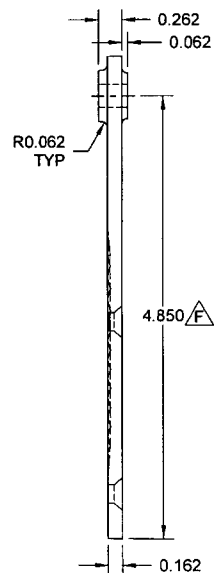
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DRAWN	AJS		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3137	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BRACKET ASSEMBLY	NTS
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D3137-1 BRACKET



D3137-7 BRACKET

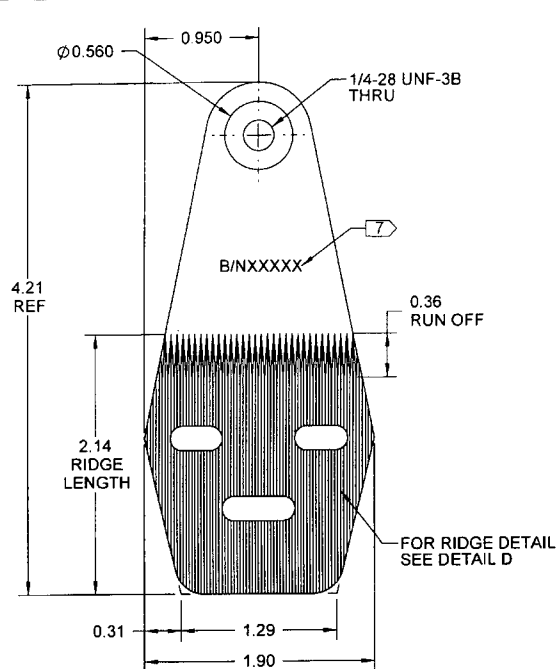


NOTES:

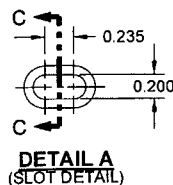
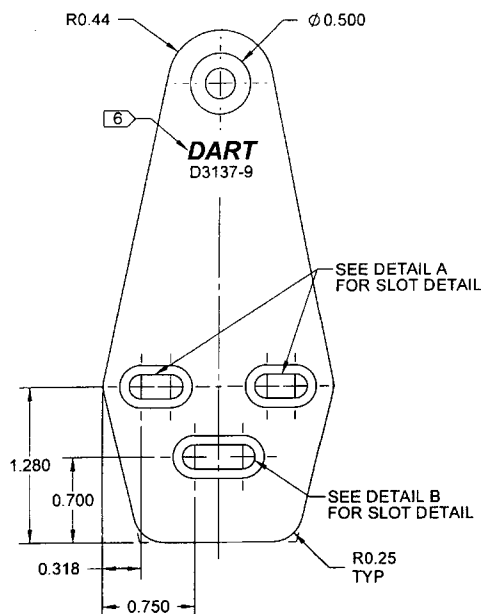
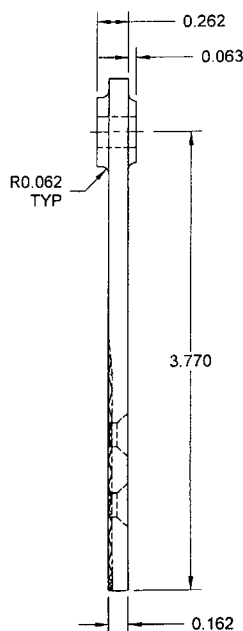
- 1) MATERIAL: -1 & -7
17-4PH STAINLESS STEEL
PER AMS 5604 OR 5643
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
PER DART SPEC. M17-4-B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: ENGRAVE DART LOGO USING 0.20 HIGH LETTERS & P/N WITH USING .15 HIGH LETTERS TO A MAX. DEPTH OF 0.010.
- 7) SCRIBE WITH DART B/N USING VIBRATING STYLUS
- 8) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
- 9) -1 REPLACES PREMIER P/N B30-23000-105/-106

RELEASED
09-06-26

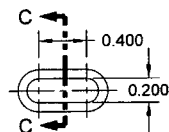
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DRAWN	AJS		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3137	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BRACKET ASSEMBLY	NTS
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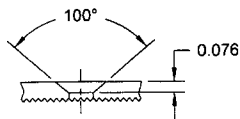
D3137-9 BRACKET



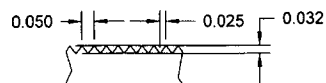
**DETAIL A
(SLOT DETAIL)**



**DETAIL B
(SLOT DETAIL)**



**SECTION C-C
(SLOT DETAIL)**



**DETAIL D
SCALE 2X
(TYPICAL RIDGE DETAIL)**

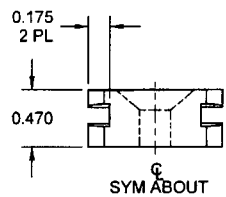
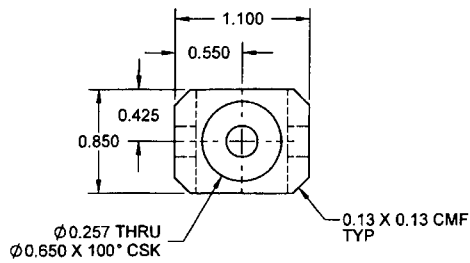
NOTES:

- 1) MATERIAL: 17-4PH STAINLESS STEEL
PER AMS 5604 OR 5643
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
PER DART SPEC. M17-4-B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: ENGRAVE DART LOGO USING 0.20 HIGH LETTERS & P/N WITH USING .15 HIGH LETTERS TO A MAX. DEPTH OF 0.010
- 7) SCRIBE WITH DART B/N USING VIBRATING STYLUS
- 8) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
- 9) REPLACES PREMIER P/N B30-23000-105/-108

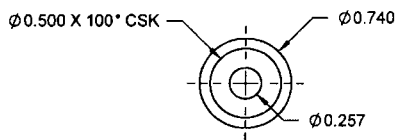
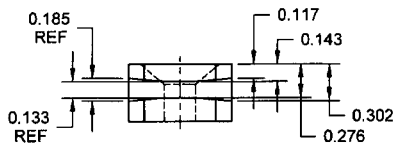
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DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3137	REV. F
MFG. APPR.			SHEET 4 OF 5
APPROVED		TITLE BRACKET ASSEMBLY	SCALE
DE APPR.			NTS
DATE	08.05.30	COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
08.06.26

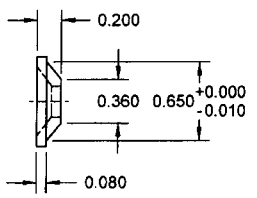
8 7 6 5 4 3 2 1



D3137-3 GUIDE



D3137-5 WASHER



- NOTES:**
 1) MATERIAL: -3
 DELRIN II 150E OR ACETRON GP ACETAL, BAR
 (REF DART SPEC M-DELIN-B)
 -5
 6061-T6 (OR 6061-T651/ T6510/ T6511/ T62) ALUMINUM BAR
 PER-AMS-QQ-A-225/8 (OR AMS 4117/ 4128/ 4145/ 4116)
 OR PER-QQ-A-200/8 (OR AMS 4160)
 REF. DART SPEC M6081T6R
 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 (-5 ONLY)
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
 6) IDENTIFICATION: NONE
 7) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
 8) -3 REPLACES PREMIER P/N B30-2300-207
 -5 REPLACES PREMIER P/N B30-2300-209

RELEASED
 08.07.02.14

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3137	SHEET 5 OF 5
APPROVED		TITLE	SCALE
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